

Adept Educational Evaluation

- Goals:
- Conduct evaluation of ADEPT as an integral component of the design process
- Assess ADEPT usability in learning situations and provide feedback to the design process
- Implementation context: Undergraduate courses at UCSB and UCLA in geography and other disciplines that use geo-spatial data

Selected Research Questions:

- Selected Research Questions:
- How can Iscapes support domain knowledge, work practices, and reasoning models of the multiple disciplines that use of geo-spatial resources?
- How can ADEPT accommodate users with different skills, knowledge, cognitive styles, and pedagogical styles?
- How can ADEPT help users to view original evidence in new ways to answer scientific or geographical questions?
- How can ADEPT support the range of heterogeneous resources and their metadata necessary for learning applications? (scalability, extensibility)

First year progress :

- Course: Geography of the Physical Environment; 3 sections at UCLA, 1 section at UCSB
- Data collection: Developed instruments; observed classrooms; gathered baseline data on student demographics; conducted interviews with faculty, students, and instructional development staff.
- ADEPT deployment: Modules on fluvial processes and hydrology. Powerpoint mockups with slides, scanned images, sound, and Quicktime movies (4 lectures at UCSB, 1 lecture at UCLA)

First year progress continued:

- Selected Initial Results:
- Faculty approaches to teaching the same core course vary widely in intellectual framing of course content, teaching styles, and presentation of topics.
- Faculty wish to integrate additional materials into ADEPT, which has implications for system design, management of intellectual property, and sharing of resources.
- Even faculty who employ high end technology in their research tend to rely on chalkboards, overheads, and slide projectors for instruction.
- Display, layout, and other presentation features are important considerations. Visual context must be provided by clear labeling, zooming, use of recognizable geographic features, and other means.